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(12)

EUROPEAN PATENT APPLICATION

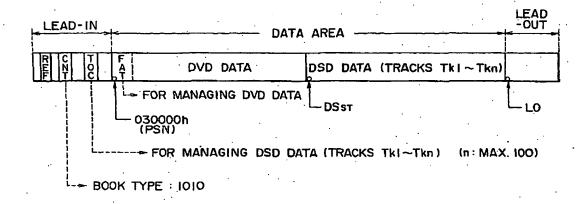
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 NL PT SE
- (30) Priority: 04.07.1996 JP 19271296
- (71) Applicant: SONY CORPORATION Tokyo 141 (JP)
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- (54) Recording medium and reproducing apparatus
- (57) A recording medium conforming with a specific physical format of DVD or the like is contrived to achieve superior sound quality in audio data recording and reproduction, common usability of data, and enhanced interchangeability of apparatus. In this recording medium, identification data signifying the existence of recorded data of a second data format (DSD) different from a first

data format (DVD) is included in physical format management information recorded in a lead-in area. The data of such second data format is recorded in a data area in conformity with the physical format management information. Second data management information (TOC) is recorded at a predetermined position to manage an operation of reproducing the data of the second data format.

FIG. 27



Printed by Jouve, 75001 PARIS (FR)

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EUROPEAN SEARCH REPORT

Application Number

Category	Citation of document with indication	on, where appropriate,	Relevant	CLASSIFICATION OF THE
Ja. 0 go. 7	of relevant passages		to claim	APPLICATION (IntCl.5)
γ	EP 0 691 651 A (SONY CO	ORP)	1,3-6,	G11B27/32
	10 January 1996 (1996-0	91-10)		G11B27/30
	* column 10, line 14 -	column 18, line 22:		G11B27/10
	figures 68,7,11-14 *		1	G11B20/00
		. •		G11B20/10
Y	EP 0 613 144 A (SONY CO	ORP)	1,3-6,	G11B20/12
	31 August 1994 (1994-08	15,17-19	G11B19/02	
	* the whole document *	•		G11B19/12
			1 1	G11B7/00
A	EP 0 635 835 A (SONY C	DRP)	1-4,6,	G11B7/007
	25 January 1995 (1995-)	91-25)	15-20	H04N5/85
	* the whole document *			
A	EP 0 714 098 A (TOKYO	- SHIRAHDA ELECTDIC	1,3-5,15	
^	CO) 29 May 1996 (1996-0	16-29)	1,5-5,19	
	* the whole document *	55 25,		
		-	1	
Α	EP 0 165 320 A (SONY C	ORP)	1-5,13,	
•	27 December 1985 (1985	-12-27)	15,25	. •
	* the whole document *	* * * * * * * * * * * * * * * * * * * *	•	
		- 		TECHNICAL FIELDS SEARCHED (Int.CI.6)
A	EP 0 706 185 A (TIME W	ARNER INTERACTIVE	1,3-5	
	GROUP) 10 April 1996 (1990-04-10)	· ·	G11B H04N
	* the whole document *			HU4N
P.A	EP 0 777 227 A (SONY C	- Npp)	1,3,13,	
1,1	4 June 1997 (1997-06-0	4)	15, 17, 25	·
	* the whole document *	• •	130,500,500	•
		-	}	
P,A	EP 0 776 008 A (SONY C	ORP)	1,10-15,	· ·
	28 May 1997 (1997-05-2	8)	23-26	
	* the whole document *			
		-	1	•
P,A	FR 2 732 497 A (AMBRE	SARL	[1,3-5,8,	1
	4 October 1996 (1996-1	0 -04)	9,12	
	* the whole document *		1.	}
	1 *		ł	
<u> </u>	<u> </u>		_	
	The present search report has been	drawn up for all claims		
	Place of search	.' , 	Examiner	
	THE HAGUE	4 April 2000	Daa	almans, F
	CATEGORY OF CITED DOCUMENTS	T ; theory or pring	lple underlying the	invention
	rticularly relevant if taken alone	E : earlier patent of after the filing of	focument, but publ	ished on, or
Y:pa	sticularly relevant if combined with another	D : document cite	d in the auctication	
A:tec	current of the same ostegory chnological background		for other reasons	
	nuaritan displosure	سيقة فيران شيفينيس والأواران	same patent famil	v comespondino

EP 0 817 195 A3

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 97 30 4820

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-04-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0691651 A	10-01-1996	JP 8022688 A	23-01-199
	•	CN 1121625 A	01-05-199
	•	US 5740304 A	14-04-199
EP 0613144 A	31-08-1994	JP 7014313 A	17-01-199
		JP 6251563 A	09-09-199
		DE 69422535 D	17-02-200
		US 5687397 A	11-11-199
• • • =		US 5737639 A	07-04-199
		US 5799212 A	25-08-199
EP 0635835 A	25-01-1995	JP 7085605 A	31-03-19
		AU 674754 B	09-01-199
		AU 6752194 A	02-02-199
•		DE 69421219 D	25-11-19
		DE 69421219 T	19-02-20
EP 0714098 A	29-05-1996	JP 8147939 A	07-06-19
		AT 175804 T	15-01-19
•		AU 693282 B	25-06-19
	•	AU 3935995 A	17-06-19
		BR 9506563 A	28-10-19
		CA 2181265 A	30-05-19
	• .	CN 1139493 A	01-01-19
		DE 69507270 D	25-02-19
	,	DE 69507270 T	12-08-19
·		EP. 0869497 A	07-10-19
		WO 9616418 A	30-05-19
		NO 963071 A	06-09-19
		US 5778142 A	07-07-19
•		JP 2880981 B	12-04-19
•		JP 10083661 A	31-03-19
		JP 2747262 B	06-05-19
		JP 8263969 A	11-10-19
EP 0165320 A	27-12-1985	JP 8028054 B	21-03-19
	•	JP 60119670 A	27-06-19
		AT 76996 T	15-06-19
1	•	AU 587963 B	
•		BR 8407199 A	05-11-19
		DE 3485761 A	09-07-19
		HK 81595 A	01-06-19
		WO 8502481 A	06-06-19
		KR 9501871 B	04-03-19
		KR 9300989 B	
		SG 9590659 A	01-09-19

a For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

3

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 97 30 4820

This annex lists the patent family members retailing to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-04-2000

	alent documer d in search rep		Publication date		Patent family member(s)	Publication date
EP	0165320	Ā		US	4893193 A	09-01-1990
EP	0706185	A	10-04-1996	US AT DE JP	5602815 A 187575 T 69513777 D 8180417 A	11-02-1997 15-12-1999 13-01-2000 12-07-1996
EP	0777227	A	04-06-1997	AU AU BR CN WO US US	709193 B 5845596 A 9606403 A 1159245 A 9638842 A 5999508 A 5856958 A 5926448 A	26-08-1999 18-12-1996 28-10-1997 10-09-1997 05-12-1996 07-12-1999 20-07-1999
EP	0776008	A	28-05-1997	JP US JP	9147487 A 5712838 A 5872755 A	06-06-1997 27-01-1998 16-02-1999
FR	2732497	Α	04-10-1996	NONE		
	. *		· .			
						· .
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		•	•		·	

b For more details about this annex : see Official Journal of the European Patent Office, No. 12/82